UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Bey 1459.

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

23483 7590 05/29/2008

WILMERHALE/BOSTON 60 STATE STREET BOSTON, MA 02109 EXAMINER
DENG, ANNA CHEN

PAPER NUMBER

ART UNIT 2191 DATE MAILED: 05/29/2008

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNIEY DOCKET NO. CONTRIMATION NO. 10748.317 12739/2003 Ales Brown 1801270.00137US1 8023

TITLE OF INVENTION: METHOD AND APPARATUS FOR PERFORMING NATIVE BINDING

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$720	\$300	\$0	\$1020	08/29/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless corrects maintenance fee notifica	ed belôw or directed oth	ng the Patent, advance on erwise in Block 1, by ((a) specifying a new co	orresp	ondence address; ar	d/or (b) indicating a sep	correspondence address as arate "FEE ADDRESS" for	
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)					Note: A certificate of mailing can only be used for domestic mailings of the Fe(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
23483	7590 05/29	V2008			Certifi	cate of Mailing or Trans	mission	
WILMERHAL 60 STATE STR BOSTON, MA	EET			I here State: addre transi	eby certify that this l s Postal Service with essed to the Mail S mitted to the USPTO	Pec(s) Transmittal is bein sufficient postage for fir top ISSUE FEE address (571) 273-2885, on the c	g deposited with the United st class mail in an envelope above, or being facsimile ate indicated below.	
							(Depositor's name)	
							(Signature)	
							(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENT	FOR	A	FTORNEY DOCKET NO.	CONFIRMATION NO.	
10/748,317	12/29/2003		Alex Brown		-	1801270.00137US1	8023	
TITLE OF INVENTION	: METHOD AND APPA	ARATUS FOR PERFOR	MING NATIVE BIND	ING				
APPLN, TYPE		L MANTE PART DATE	PUBLICATION FEE D	[PREV. PAID ISSUE F	EE TOTAL FEE(S) DUE	DATE DUE	
	SMALL ENTITY YES	ISSUE FEE DUE \$720	S300	UE	\$0	\$1020	08/29/2008	
nonprovisional				_	30	\$1020	08/29/2008	
EXAM		ART UNIT	CLASS-SUBCLASS	Ш				
DENG, AN		2191	717-136000	_				
1. Change of correspond CFR 1.363).	ence address or indicatio	n of "Fee Address" (37	2. For printing on the		itent front page, list 3 registered patent a	ttorneys I		
Change of corresp	ondence address (or Cha B/122) attached.	inge of Correspondence	or agents OR, alteri	nativ	ely,			
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Custome Number is required.			registered attorney or agent) and the names of up to					
3. ASSIGNEE NAME A	ND RESIDENCE DATA	A TO BE PRINTED ON	THE PATENT (print or	r type	e)			
PLEASE NOTE: Uni	less an assignee is ident	ified below, no assignee	data will appear on th	e pai	tent. If an assignee	is identified below, the d	ocument has been filed for	
(A) NAME OF ASSI		or and total in the	(B) RESIDENCE: (C					
Please check the appropr	iate assignee category or	categories (will not be p	orinted on the patent):	۵	Individual 🗖 Corp	oration or other private gr	oup entity Government	
4a. The following fee(s)	are submitted:	4	b. Payment of Fee(s): (Pleas	se first reapply any	previously paid issue fee	shown above)	
☐ Issue Fee			A check is enclosed.					
Publication Fee (No small entity discount permitted) Advance Order - # of Copies			☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).					
			overpayment, to D	epós	it Account Number	(enclose a	n extra copy of this form).	
 Change in Entity Sta Applicant claim 	tus (from status indicate is SMALL ENTITY statu		b. Applicant is no	long	er claiming SMALL	ENTITY status. Sec 37 C	FR 1.27(g)(2).	
							ne assignee or other party in	
Authorized Signature					Date			
Typed or printed nam					Registration No.			
This collection of inform an application. Confiden submitting the completes this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but 'irginia 22313-1450. DC 113-1450.	CFR 1.311. The informati U.S.C. 122 and 37 CFR USPTO. Time will var rden, should be sent to the ONOT SEND FEES OR	ion is required to obtain 1.14. This collection is y depending upon the in the Chief Information Of COMPLETED FORMS	or re s esti- ndivi- fficer S TO	etain a benefit by the mated to take 12 mir dual case. Any comi r, U.S. Patent and Tro THIS ADDRESS. S	public which is to file (an autes to complete, including nents on the amount of ti- ademark Office, U.S. Dep END TO: Commissioner	d by the USPTO to process) ig gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,	

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

ss: COMMISSIONER FOR PATENTS P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

DATE MAILED: 05/29/2008

APPLICATION NO.	FILING	LING DATE FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,317	12/29/2003		Alex Brown	1801270.00137US1 8023	
23483	7590	05/29/2008		EXAMINER	
WILMERHALE/BOSTON			DENG, AN	INA CHEN	
60 STATE STRI				ART UNIT	PAPER NUMBER
BOSTON, MA 02109				2191	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 577 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 577 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/748,317 BROWN ET AL. Notice of Allowability Examiner Art Unit ANNA DENG 2191 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 2/13/2008. 2. The allowed claim(s) is/are 1,4-9,11-42,45-50,52-83,86-91 and 93-123. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) 🛛 All b) Some* c) None of the: 1. A Certified copies of the priority documents have been received.

 Certified copies of the priority documents have been received in Application No
 Copies of the certified copies of the priority documents have been received in this national stage application from International Bureau (PCT Rule 17.2(a)).
* Certified copies not received:
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requiremen noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date
(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit
 - of Biological Material

5 П	Notice	of Info	rmal Pate	ent Application	
J	INOLICE	OI IIIIO	illiai i att	ant Application	

- 6. Interview Summary (PTO-413), Paper No./Mail Date
- 7.

 Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. 🔲 Other _____.

Page 2

Application/Control Number: 10/748,317

Art Unit: 2191

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

- A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR
 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued
 examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the
 finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's
 submission filed on 2/13/2008 has been entered.
- The objection to 19-28, 60-69, and 101-110 is withdrawn in view of applicant's amendment.
- The rejection under 35 U.C.S. 103 (a) as being unpatentable over Adams USPN 6,578,193 in view of Baumgart et al. USPN 6,578,194 to claims 1-18, 29-59, 70-100, and 111-123 is withdrawn in view of applicant's amendment.
- Claims 1, 4-9, 11-42, 45-50, 52-83, 86-91, and 93-123 are pending.
- Claims 1, 4-9, 11-42, 45-50, 52-83, 86-91, and 93-123 are allowed.

REASONS FOR ALLOWANCE

6. The following is an examiner's statement of reasons for allowance:

The cited prior art taken alone or in combination fail to teach, in combination with the other claimed limitations, the translating step includes identifying a subject function in the subject program code having a corresponding native function of native code, wherein the native code is code executable by the target processor, and identifying the native function of the native code which corresponds to the identified subject function; and wherein the executing step includes executing the native function on the target processor instead of executing a translated version of the identified subject function, including transforming zero or more function parameters from a target code representation to a native code representation, invoking the native function with the transformed zero or more function parameters according to a prototype of the native function, and transforming zero or more return values of the

Application/Control Number: 10/748,317

Art Unit: 2191

invoked native function from a native code representation to a target code representation as recite in independent claims 1, 42, 83.

The closest cited prior art, the combination of Adams (USPN 6,578,193) and Baumgart et al. (USPN 6,578,194), teaches a method of translating subject program code executable by a subject processor into target program code executable by a target processor. However, the combination of Adams (USPN 6,578,193) and Baumgart et al. (USPN 6,578,194), fails to teach the translating step includes identifying a subject function in the subject program code having a corresponding native function of native code, wherein the native code is code executable by the target processor, and identifying the native function of the native code which corresponds to the identified subject function; and wherein the executing step includes executing the native function on the target processor instead of executing a translated version of the identified subject function, including transforming zero or more function parameters from a target code representation to a native code representation, invoking the native function, and transforming zero or more function parameters according to a prototype of the native function, and transforming zero or more return values of the invoked native function from a native code representation to a target code representation as recite in independent claims 1, 42, 83, and also pointed out in applicant's Remarks in page 30, paragraph 4.

These claimed limitations are not present in the prior art of record and would not have been obvious, thus all pending claims 1, 4-9, 11-42, 45-50, 52-83, 86-91, and 93-123 are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anna Deng whose telephone number is 571-272-5989. The examiner can normally be reached on Mondays to Fridays 9:30 - 6:00. Application/Control Number: 10/748,317 Page 4

Art Unit: 2191

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Zhen can be reached on 571-272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Anna Deng/

Examiner, Art Unit 2191

/Wei Zhen/

Supervisory Patent Examiner, Art Unit 2191